

REMARKS

By this amendment, the drawings have been resubmitted with red ink markings to show changes, as requested by the Examiner. In addition, claims 12 and 14 and the specification have been amended to include reference numerals in Figures 7 and 8 and to correct a typographical error. Attached is a version showing the changes made to the specification and amended claims.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADEIN THE SPECIFICATION:

Page 8, lines 1-6:

Figure 7 shows how one could actually alter the final implant as opposed to necessarily altering the cut. In this case, a distal position of the lateral femoral condyle 702 would be less than the medial femoral condyle 704 by an amount D. In addition, the trochlea would be deeper as well. A slight resection, of 10 millimeters, could be performed to that thickness of metal medially. Less metal would be restored laterally, on the order of 8 millimeters, for example, and the trochlea then correspond as well.

Page 8, lines 7-13:

Using this approach, one would also have to make alterations to the tibial surface. This could be accomplished in several ways. One could have the metal 800 thicker, as seen in Figure 8A, in which case the insert 802, typically polyethylene, would remain symmetric. Alternatively, the metal could be made symmetric, with the spacer 806 also being made thicker by the distance D, as seen in Figure 8B. This would correct for any incongruity with respect to the extension gap, while still allowing for appropriate mechanics of the patella femoral joint.

Page 8, lines 14-21:

By way of review, Figure 9A represents, once again, the current situation involving symmetric medial and lateral condyles and the corresponding trochlea. According to the invention, the trochlea

depths, which are represented by D and D' [prime] would change for a given size. As such, when the size gets larger, such as size B in the drawing of Figure 9B, the distance between the distal portions of both condyles and the trochlea remains the same. However, according to the invention, as the size of implant increases, the depth of the trochlea increases correspondingly so as to optimize the patella femoral mechanics.

Page 9, lines 1-17:

Figure 10 illustrates, from an oblique perspective, an embodiment of the invention including a medial-lateral slide enabling referencing to take place between either condyle or the trochlear region. The device includes a fixture 102 that rides on an intermedullary rod 104 including a groove 106 which receives a medial-lateral slide 110. The slide 110 further includes a slidable member 112, adjustable longitudinally in a manner generally parallel to the rod 104, including a referencing surface 114 and an angled member 116, including a cutting guide 120, which moves on the member 116, the member 116 further including calibrations 122 indicative of cutting depth. Note that the angled member 116 is not slidingly attached to the rod 112, but is rigidly attached thereto, such that as the assembly including rod and reference surface 114 moves longitudinally with respect to the bone, the member 116 moves therewith. In operation, the assembly containing rod 112, surface 114, member 116 and cutting block 120 may be moved medial to lateral, enabling the surface 114 to reference either condyle or the trochlear region of the bone 100. Having selected the reference point, the block 120 may be moved along member 116, taking note of the markings 122 which will be indicative of cutting depth. Upon selecting a desired cutting depth, one or more of the slots 124 may be used to resect either or both of the condyles, as the case may be, to install implant 200.

IN THE CLAIMS:

12. (Twice Amended) Apparatus for resecting a distal femur having prominent and non-prominent condyles separated by a trochlear region, comprising:

a fixture including a movable member which references one of a non-prominent condyle or trochlear region; and

a cutting guide to resect [the] a femur in accordance with the reference made using the fixture.

14. (Twice Amended) The apparatus of claim 12, wherein the fixture further includes a medial-to-lateral slide to which the [reference guide] movable member attaches, enabling either condyle or the trochlear region to be used as a reference for subsequent resection.

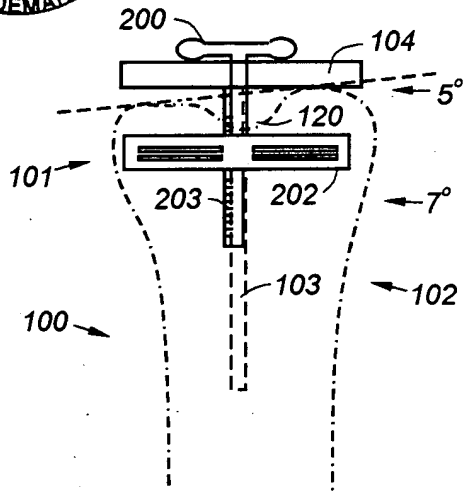


Fig - 1
(PRIOR ART)

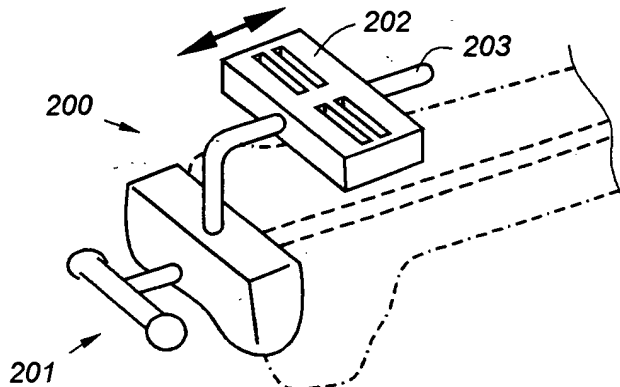


Fig - 2
(PRIOR ART)

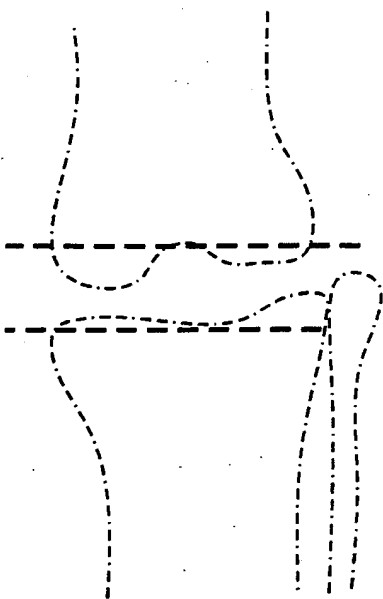


Fig - 3A
(PRIOR ART)

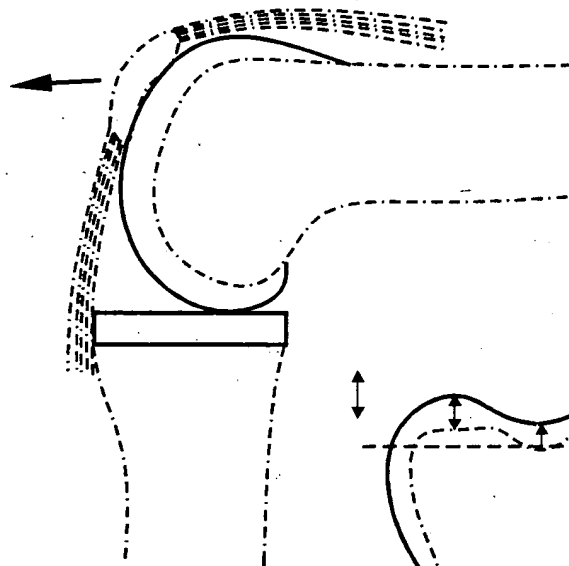


Fig - 4
(PRIOR ART)

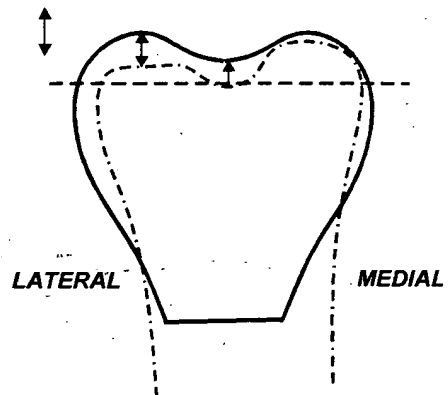


Fig - 3B
(PRIOR ART)

entry approved. 8/9/18/02

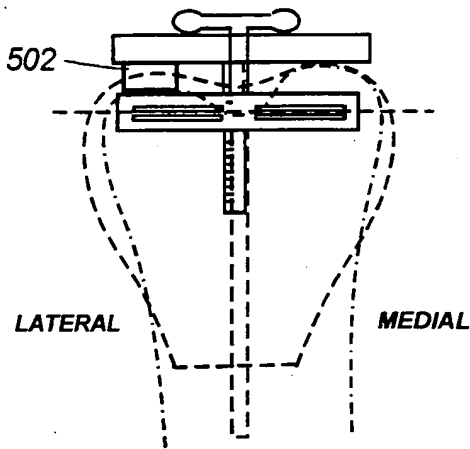


Fig - 5

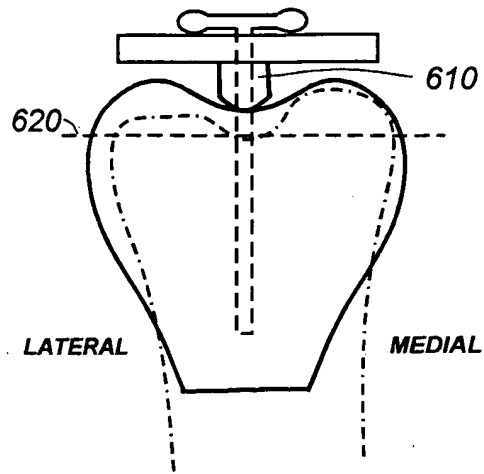


Fig - 6

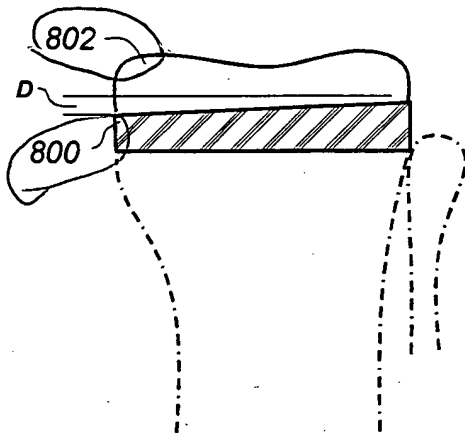


Fig - 8A

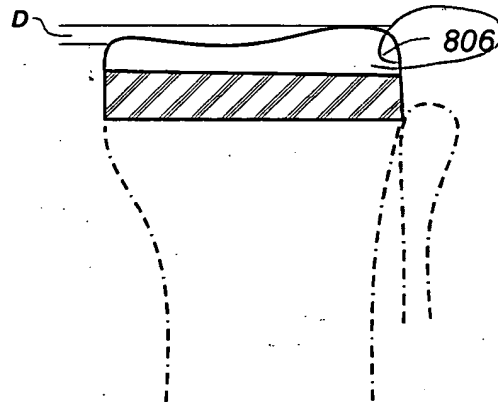


Fig - 8B

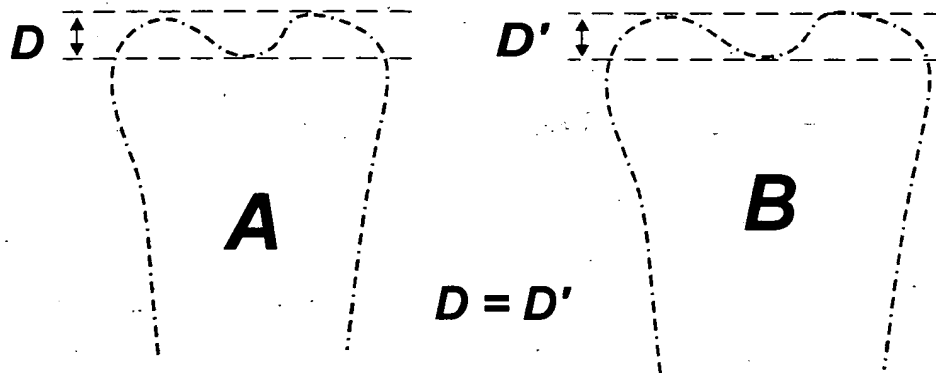


Fig - 9A

(PRIOR ART)

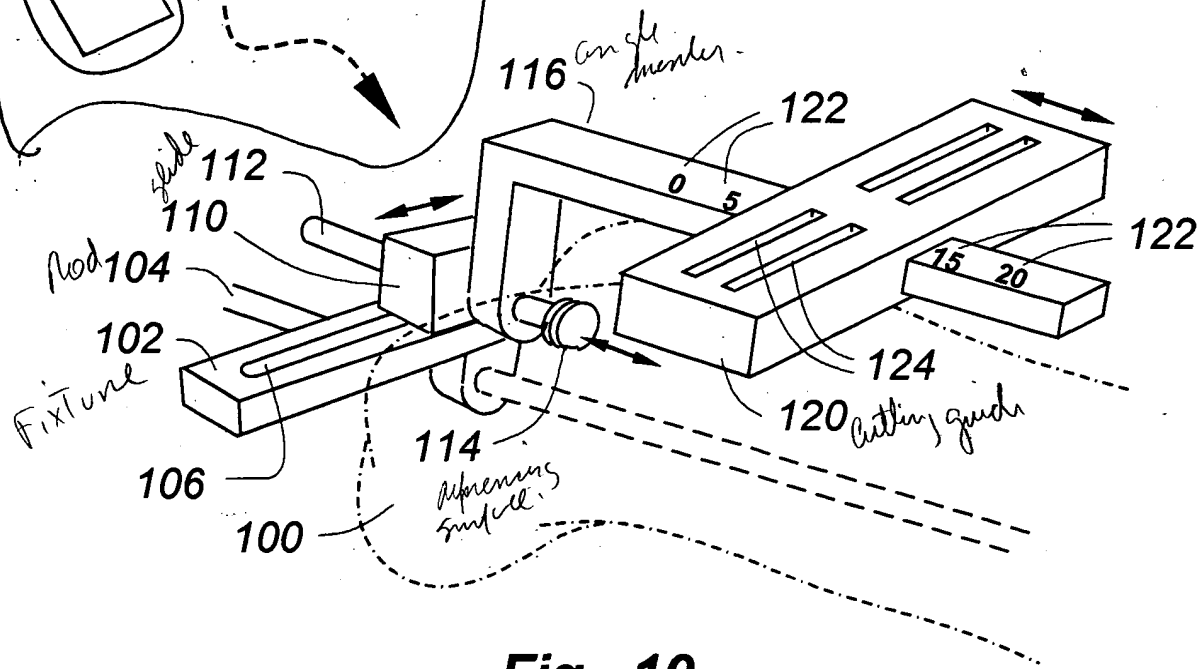
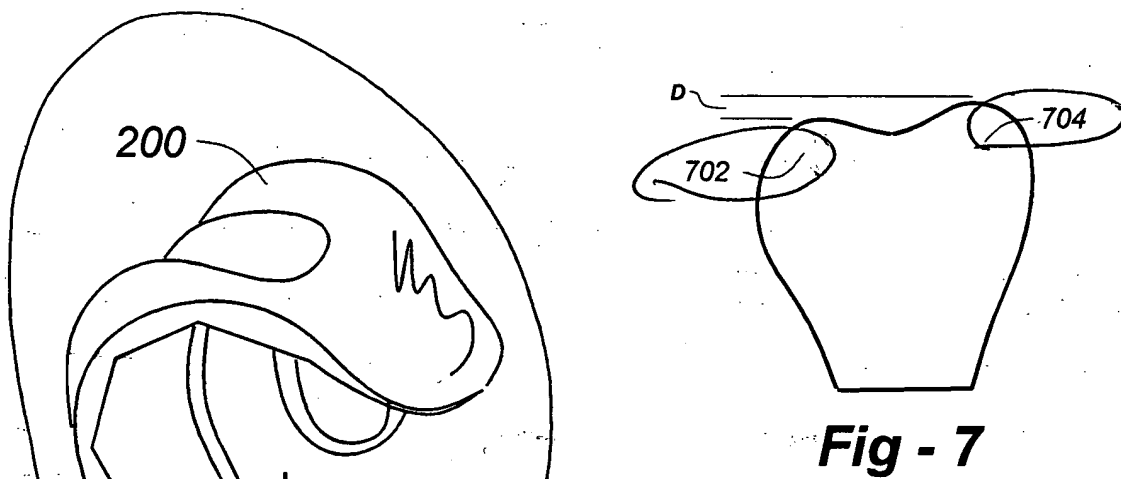
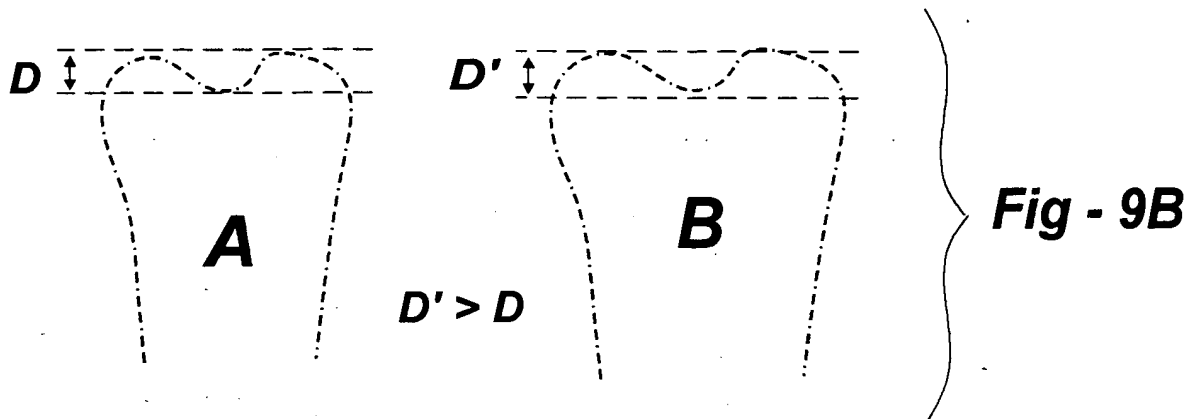


Fig - 10